Effective: August 15, 2001 Revised: August 15, 2001

## **Purpose**

The purpose of this policy is to define the procedure used by the Utah Department of Transportation (UDOT) for making revisions to the functional classification of highways in the federal aid eligible system.

## **Policy**

An adequate and integrated highway system with administrative responsibility based on functional classification has been declared to be in the public interest and is the goal of the Transportation Commission. In order to foster maintenance of such a system, the Transportation Commission will consider eligible for federal aid those portions of the highway system within the state which are classified within the functional groupings of Collector or higher.

The Engineer for Statewide Planning reviews all proposed revisions to the functional classification of highways in the state and forwards the recommended changes to the Federal Highway Administration (FHWA) for approval.

Every five years, tied to a cycle starting once the U.S. Census Bureau defines the urban area boundaries (typically 18 to 24 months after the decennial census is taken) and again five years later, the Engineer for Statewide Planning oversees a full system-wide review of the functional classification of the roadways within the state. Each roadway in the Federal-Aid-Eligible Highway System, along with those roadways proposed for inclusion in the system, is reviewed in consultation with the local agencies, the UDOT Region Directors and the metropolitan planning organizations (MPOs) to determine the its proper classification, in order to best match the actual function and usage of the roadway. A part of this effort includes keeping the total percentage of centerline mileage and vehicle miles traveled (VMT) in each functional category within the ranges prescribed by FHWA. A separate map is prepared for each county, each small urban area, and each urbanized area. The format of the maps conforms to guidelines set by FHWA and shows each roadway in the system, color coded as to functional class. In addition, the map for each urban area shows the urban area boundary, as defined by the Census, and a boundary line for a five-year urban growth projection.

Annual reviews are also performed which are intended to handle a small number of revisions for needs that were unforseen during the regular system-wide review process and which are of a time-sensitive nature that precludes waiting for the next regular review. Requests for proposed changes are accepted throughout the calendar year of these off years, due December 31. Any of these that are received by that time will then be processed by mid-February of the following year in order to have the changes entered into the HPMS database prior to March 1.

## **Background**

Beginning with the Federal-Aid Highway Act of 1973, FHWA has required the State to use functional highway classification to update the Federal-aid highway system. In the manual, **Highway Functional Classification - Concepts, Criteria and Procedures**, March 1989, FHWA defines functional classification:

"Functional classification is the process by which streets and highways are grouped together into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the part that any particular road or street should play in serving the flow of trips through a highway network."

This process also provides one method of ranking the importance of any given roadway segment to the overall transportation system and, subsequently, to programming decisions and funding prioritizations. Roadway segments are classified in rural areas as Local Roads, Minor Collectors, Major Collectors, Minor Arterials, and Principal Arterials; and in similarly in urban areas (except all Collectors are included into a single category); here listed in order of increasing mobility value and decreasing land-access value.

### **Definitions**

Most definitions are covered in the FHWA manual, **Highway Functional Classification - Concepts, Criteria and Procedures**. The following are provided in addition to those.

**Growth Area.** That area around the periphery of the Census-defined urban boundary into which urbanizing growth is anticipated to spread within the next five years.

MPO/Metropolitan Planning Organization. That organization tasked with coordinated planning of the various jurisdictions within the boundaries of each urbanized area, as defined by the U.S. Census Bureau. At present, the MPOs in Utah include Cache MPO, serving the Logan/Cache Valley area, Wasatch Front Regional Council, serving the urbanized portions of Weber, Morgan, Davis, and Salt Lake Counties, and Mountainland Association of Governments, serving urbanized Utah County. Census 2000 creates a new urbanized area in the St. George area, where a new MPO is being formed.

**Small Urban Area.** An area of a small city or town with population between 5,000 and 50,000, the boundaries of which are defined by the U.S. Census Bureau.

**UDOT Highway Functional Classification Maps.** A bound set of ledger-size maps, created and maintained by the Chief Cartographer, showing each county, small urban area, and urbanized area and the roadways therein, each of these being color-coded to indicate their functional classification, in conformance with an FHWA-defined format.

**Urbanized Area.** An area of a large city and any contiguous cities and towns with total population exceeding 50,000, the boundaries of which are defined by the U.S. Census Bureau.

#### **Procedures**

### Five-Year Statewide Review of Functional Classifications UDOT 07-25.1

**Responsibility:** Engineer for Statewide Planning

#### Actions

- 1. Maintain a historical record of all changes to the functional classification system for the state.
- 2. Maintain a list of holders of the UDOT Highway Functional Classification Maps, including, at a minimum, the Program Development Director and the entire Program Development staff, the Library, each of the Division and Region Directors, other UDOT staff, as requested, FHWA, each County Commission, and others as requested.
- 3. After the U.S. Census Bureau provides the urban area boundaries defined by the decennial census, meet with representatives of each of the cities in the small urban areas and consult with them on establishing the projected five-year growth area around each small urban area. Meet again five years later to update the growth area projections, then repeat the remaining steps of the process.

## **Responsibility:** Engineer for Urban Planning/Urban Planning Manager

- 4. After the U.S. Census Bureau provides the urban area boundaries, coordinate with each MPO in determining the extent of the projected five-year growth area for their urbanized area. Meet again five years later to update the growth area projections, then repeat the remaining steps of the process.
- 5. In coordination with each MPO, review system conformity within the urbanized areas to federal guidelines and parameters, as outlined in the FHWA manual **Highway Functional Classification Concepts, Criteria and Procedures**, March 1989. Revise as necessary to meet the guidelines, add new roadways, and upgrade or downgrade existing classifications, based on the projected needs over the upcoming five years. Cooperate with the Engineer for Statewide Planning to ensure consistency with the statewide system and particularly at the boundaries between the urbanized areas and the rural areas.
- 6. As part of the above review, conduct field reviews of roadways, as appropriate. Include representatives of the counties, MPOs, Statewide Planning, and of the FHWA Division Office in the field visits.

- 7. Prepare a list of recommended classifications for each urbanized area, showing centerline mileage and vehicle miles traveled (VMT) for each roadway. List totals in each classification for each county, along with percentages and VMT.
- 8. Advise UDOT Region Directors and MPO Technical Committees of recommended changes.
- 9. Forward recommendations to the Engineer for Statewide Planning.

#### **Responsibility:** Engineer for Statewide Planning

- 10. Conduct a statewide review of the functional classification system. Review statewide system conformity to federal guidelines and parameters, as outlined in the FHWA manual **Highway Functional Classification Concepts, Criteria and Procedures**, March 1989. Revise as necessary to meet the guidelines, add new roadways, and upgrade or downgrade existing classifications, based on the projected needs over the upcoming five years. Perform the work for the rural and small urban areas and cooperate with the efforts of the Engineer for Urban Planning/Urban Planning Manager in the urbanized areas, ensuring consistency throughout the statewide system and particularly at the boundaries between the urbanized areas and the rural areas.
- 11. As part of the above review, conduct field reviews of roadways, as appropriate. Include representatives of the counties and of the FHWA Division Office in the field visits.
- 12. Prepare a list of recommended classifications for each county, small urban area, and urbanized area, showing centerline mileage and vehicle miles traveled (VMT) for each roadway. List totals in each classification for each county, along with percentages and VMT.
- 13. Provide the data on urban area boundaries, five-year growth projections, and recommended functional classifications to the Chief Cartographer to prepare the UDOT Highway Functional Classification Maps.
- 14. Advise the UDOT Region Directors and the counties of the recommended functional classifications.
- 15. Present the list of recommended classifications and the Maps to the Engineer for Transportation Planning for review and approval.

#### **Responsibility:** Engineer for Transportation Planning

16. Review recommendations submitted by the Engineer for Statewide Planning and approve for submission to the FHWA Division Office.

## **Responsibility:** Engineer for Statewide Planning

- 17. Forward the final list and Maps to the FHWA Division Office for their concurrence on the proposed functional classifications of the system.
- 18. Have the UDOT Highway Functional Classification Maps printed, bound, and distributed to all the Map holders. In addition, forward copies of the documentation to the Transportation Records Manager, the Chief Cartographer, and the HPMS Database Manager.

## Annual Review of Individual Requests for Functional Classification Changes - Urbanized Areas UDOT 07-25.2

**Responsibility:** Metropolitan Planning Organization (MPO)

#### **Actions**

1. Coordinate local requests for revisions to the functional classification of segments of the highway system within the appropriate urbanized area and submit a written request to the UDOT Engineer for Urban Planning/Urban Planning Manager. Include with the request appropriate maps and information detailing the length, beginning and ending reference points, actual or projected AADT for any local roads proposed to be upgraded, and other related information. In order to maintain a balance in the percentages of mileage and VMT in each classification, within each urbanized area, requests for upgrades should include consideration of other routes that could be downgraded in the same area, as well.

#### **Responsibility:** Engineer for Urban Planning/Urban Planning Manager

- 2. At the beginning of each calendar year when a full five-year statewide review is not to be performed, after all requests have been received from the MPOs, perform a field review of the requested revisions. Include representatives from the MPO, Statewide Planning, and the FHWA Division Office.
- 3. Review and evaluate the request for conformance with federal guidelines and parameters, as outlined in the FHWA manual **Highway Functional Classification**-Concepts, Criteria and Procedures, March 1989. Consider the corresponding downgrades that have been proposed or the rationale presented for not including a downgrade proposal.
- 4. Prepare a list of recommended changes, percentages of mileage and VMT, along with revised page(s) of the UDOT Highway Functional Classification Maps.
- 5. Advise the UDOT Region Director and the MPO Technical Committee of the recommended changes.
- 6. Recommend final changes to the Engineer for Statewide Planning.

#### **Responsibility:** Engineer for Statewide Planning

7. Review recommendations for the urbanized areas from the Engineer for Urban Planning/Urban Planning Manager. Compile these together with any rural and small urban recommendations that may have been prepared under 07-25.3, below, and forward all these to the Engineer for Transportation Planning for approval.

#### **Responsibility:** Engineer for Transportation Planning

8. Review recommendations submitted by the Engineer for Statewide Planning and approve for submission to the FHWA Division Office.

#### **Responsibility:** Engineer for Statewide Planning

- 9. Forward the final list and Maps to the FHWA Division Office for their concurrence on the proposed functional classifications of the system. Include letters of concurrence from the MPOs on the recommended changes.
- 10. Have the revised pages of the UDOT Highway Functional Classification Maps printed and distributed to all the Map holders. In addition, forward copies of the documentation to the Transportation Records Manager, the Chief Cartographer, and the HPMS Database Manager.

## Annual Review of Individual Requests for Functional Classification Changes - Rural and Small Urban Areas UDOT 07-25.3

**Responsibility:** County Commission / UDOT Region Director

#### **Actions**

1. Coordinate local requests for revisions to the functional classification of segments of the highway system within the County and submit a written request to the UDOT Engineer for Statewide Planning. Include with the request appropriate maps and information detailing the length, beginning and ending reference points, actual or projected AADT for any local roads proposed to be upgraded, and other related information. In order to maintain a balance in the percentages of mileage and VMT in each classification within each county or small urban area, requests for upgrades should include consideration of other routes that could be downgraded in the same area, as well.

## **Responsibility:** Engineer for Statewide Planning

- 2. At the beginning of each calendar year when a full five-year statewide review is not to be performed, after all requests have been received from the counties or UDOT Region Directors, perform a field review of the requested revisions. Include representatives from the County and the FHWA Division Office.
- 3. Review and evaluate the request for conformance with federal guidelines and parameters, as outlined in the FHWA manual **Highway Functional Classification**-Concepts, Criteria and Procedures, March 1989. Consider the corresponding downgrades that have been proposed or the rationale presented for not including a downgrade proposal.
- 4. Prepare a list of recommended changes, percentages of mileage and VMT, along with revised page(s) of the UDOT Highway Functional Classification Maps. Advise the UDOT Region Director and the County Commission of the recommended changes. Compile these recommendations together with any urbanized recommendations that may have been prepared under 07-25.2, above, and forward all these to the Engineer for Transportation Planning for approval.

## **Responsibility:** Engineer for Transportation Planning

5. Review recommendations submitted by the Engineer for Statewide Planning and approve for submission to the FHWA Division Office.

#### Responsibility: Engineer for Statewide Planning

- 6. Forward the final list and Maps to the FHWA Division Office for their concurrence on the proposed functional classifications of the system. Include letters of concurrence from the MPOs on the recommended changes.
- Have the revised pages of the UDOT Highway Functional Classification Maps 7. printed and distributed to all the Map holders. In addition, forward copies of the documentation to the Transportation Records Manager, the Chief Cartographer, and the HPMS Database Manager.

Page: 10 of 12

## **Functional Classification Changes to Database and Mapping**

UDOT 07-25.4

**Responsibility:** Chief Cartographer

#### **Actions**

- 1. Create and maintain the UDOT Highway Functional Classification Maps, following the general format specified by FHWA Headquarters.
- 2. Upon request from Engineer for Statewide Planning, as outlined in 07-25.1, 07-25.2, and 07-25.3, above, prepare draft changes to the affected pages of the UDOT Highway Functional Classification Maps.

#### **Responsibility:** Engineer for Statewide Planning

3. Upon notice of concurrence from the FHWA District office on proposed revisions, forward the FHWA letter and approved final information and documentation to the to the Transportation Records Manager, the Chief Cartographer, and the HPMS Database Manager.

#### **Responsibility:** Transportation Records Manager

- 4. Assign appropriate route designation to new routes, provide information to the Chief Cartographer and the HPMS Database Manager.
- 5. Calibrate new routes and install reference posts as needed.
- 6. Update Reference System.

## **Responsibility:** Chief Cartographer

7. Prepare copies for distribution of the revised UDOT Highway Functional Classification Maps, at five-year review, or of the affected map sheets, at annual review.

## **Responsibility:** HPMS Database Manager

- 8. Collect field inventory information as needed.
- 9. Update mileage and HPMS database.

**Responsibility:** Engineer for Statewide Planning

10. Distribute copies of the UDOT Highway Functional Classification Maps, or affected sheets, to all the Map holders.